ABSTRACT

There is provided a field effect transistor including a substrate, an organic semiconductor layer 6, an insulating layer 3, and a conductive layers 2, 4, and 5, wherein the insulating layer 3 comprises a cured product of a phenol resin represented by the following general formula (1):

10 (R¹, R² and R³ each represent hydrogen atom, halogen atom, hydroxymethyl group, alkyl group having 1 to 12 carbon atoms, alkenyl group, alkinyl group, alkoxyl group, alkylthio group, or alkyl ester group, X¹ and X² each represent hydrogen atom, alkyl group having 1 to 12 carbon atoms, alkenyl group, alkinyl group, or aryl group, and n represents an integer of 0 to 2,000.) According to the present invention, a field effect transistor capable of smoothening the gate electrode having a low surface smoothness, in which a current leak to the gate electrode is small can be obtained.